

# Lepidoptera at the Olentangy River Wetlands in 1998

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## Introduction

During 1998, the sixth year of monitoring Lepidoptera at The Olentangy River Wetland Research Park (ORWRP), activities were again limited to weekly transect surveys adding to a quantitative baseline for resident butterfly species. Comparing these to previous surveys (Simhai and Horn, 1995; Horn, 1996; Gardner and Horn, 1997; Horn 1998) allows us to track continued response of Lepidoptera to establishment of wetland vegetation in the area.

## Methods

From April 10 through 1 October 1, 1998, the site was sampled weekly (occasionally biweekly) usually on Sunday from about noon until 2 p.m. A circuitous transect was followed around the entire perimeter of the open area (i.e., along the outermost edge of bottomland forest) and in a figure eight around the edge of the basins. Lepidoptera were identified with the aid of binoculars, and when identity was uncertain, specimens were captured, identified through information in Opler and Malikul (1991), recorded, and

released.

## Results and Discussion

Twenty-one species of butterflies and skippers were encountered in 1998 (Table 1). The European Skipper, *Thymelicus lineola*, was recorded for the first time. It is common in meadows throughout northeastern North America (Iftner et al., 1992). A single Pipevine Swallowtail, *Battus philenor*, was encountered on 7 June. The Pipevine Swallowtail was unusually abundant in southern Ohio during 1998. The Bronze Copper (*Lycaena hyllus*) was encountered three times. It is a commonly observed wetland specialist in Ohio (Iftner et al., 1992) and has been observed at ORWRP since 1994. The Meadow Fritillary (*Boloria bellona*), a moist meadow specialist, was encountered for the first time since 1994.

As in previous years, the most commonly observed species are known to be adapted to early successional and/or disturbed habitats (Simhai and Horn, 1995). Seasonality patterns conformed to known trends throughout Ohio (Iftner et al., 1992). Overall, butterfly numbers and species richness

Table 1. Average encounters per sampling date for butterfly species at ORWRP in 1998

	May	June	July	Aug.	Sept.
Silver-spotted Skipper	0.3	1.3	0.3	0	0
Wild Indigo Dusky Wing	0	1	1.3	2.5	0
Common Sooty Wing	0	0.5	3.5	2.0	1
Least Skipper	0	0.8	1.8	2.3	1
Peck's Skipper	0	2.3	0.5	4.3	1.5
European Skipper	0	0.5	0.5	0	0
Pipevine Swallowtail	0	0.2	0	0	0
Black Swallowtail	0	0.5	2.5	1.5	0
Tiger Swallowtail	0.2	0	0	0	0
Cabbage Butterfly	5.3	9.5	10	11.3	4.3
Clouded Sulfur	0.5	0.8	1	3.5	3.3
Alfalfa Butterfly	0	0	0	1.7	4.8
Bronze Copper	0	0.2	0.5	0	0
Eastern Tailed Blue	0	3.3	6.3	4.3	1.5
Spring Azure	0.8	0.2	0	0	0
Question Mark	3.3	0	0	0	0.5
Comma	1.5	0	0	0.8	1.0
Red Admiral	1.5	1.2	0	0	0
Meadow Fritillary	0	0.2	0.3	0	0
Pearl Crescent	1.5	2.5	6.3	8.5	4.3
Monarch	0	0	1	0.5	0.3

were low in comparison with expectations, probably due to reduced availability of nectar resources, especially in midsummer.

The Monarch, *Danaus plexippus*, was very much reduced in frequency compared with 1997 although its food plant—milkweed—remains common at ORWRP. Butterfly monitors throughout Ohio commented on lower numbers of Monarchs during 1998.

## References

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